

SNP	Location	Gene	Genotype	Detailed location	Allele 1	Allele 2	Allele 3	p-value
<i>rs2808</i>	10726310	<i>BCAP29</i>	C/T	3'UTR	0	0		NA
<i>rs10248755</i>	13237390	<i>INTERGENIC</i>	A/G	3' ETV1	9	5		0.28505
<i>rs194025</i>	13237848	<i>INTERGENIC</i>	A/G	3' ETV1	2	2		1
<i>rs194020</i>	13239854	<i>INTERGENIC</i>	C/A	3' ETV1	15	12		0.563703
<i>rs10225248</i>	13247686	<i>INTERGENIC</i>	G/T	3' ETV1	19	15		0.492717
<i>rs12530843</i>	13248033	<i>INTERGENIC</i>	G/T	3' ETV1	11	18		0.193647
<i>rs6962700</i>	13250882	<i>INTERGENIC</i>	T/C	3' ETV1	6	5		0.763025
<i>rs6967406</i>	13251391	<i>INTERGENIC</i>	C/G	3' ETV1	8	12		0.371093
<i>rs6973933</i>	13253069	<i>INTERGENIC</i>	G/A	3' ETV1	14	21		0.236724
<i>rs7808903</i>	13726860	<i>INTERGENIC</i>	G/T	3' ETV1	10	12		0.669815
<i>rs7783357</i>	13729014	<i>INTERGENIC</i>	C/T	3' ETV1	13	17		0.465209
<i>rs1893403</i>	13731213	<i>INTERGENIC</i>	G/T	3' ETV1	20	14		0.303484
<i>rs12530542</i>	13731501	<i>INTERGENIC</i>	C/T	3' ETV1	22	11		0.055511
<i>rs1942130</i>	13733647	<i>INTERGENIC</i>	T/C	3' ETV1	14	9		0.297147
<i>rs2214868</i>	13734060	<i>INTERGENIC</i>	C/G	3' ETV1	13	17		0.465209
<i>rs2848839</i>	13734285	<i>INTERGENIC</i>	G/A	3' ETV1	12	12		1
<i>rs2214867</i>	13734725	<i>INTERGENIC</i>	G/A	3' ETV1	17	20		
<i>rs2568651</i>	13735750	<i>3' ETV1</i>	C/T	3' ETV1	2	3		0.654721
<i>rs12537354</i>	13735875	<i>INTERGENIC</i>	C/G	3' ETV1	13	12		0.841481
<i>rs2848844</i>	13738141	<i>INTERGENIC</i>	A/G	3' ETV1	9	14		0.297147
<i>rs2116633</i>	13738349	<i>INTERGENIC</i>	C/A	3' ETV1	9	7		0.617075
<i>rs6969205</i>	14244367	<i>DGKB</i>	C/T	INTRON	14	16		0.715001
<i>rs10486048</i>	14244402	<i>DGKB</i>	A/G	INTRON	5	5		1
<i>rs6461075</i>	14247910	<i>DGKB</i>	A/G	INTRON	17	11		0.256839
<i>rs4721311</i>	14248351	<i>DGKB</i>	G/T	INTRON	19	20		0.87278
<i>rs6842</i>	16834597	<i>AGR2</i>	C/T/A	EXON-MIS/SYN	20	14	0	0.303484
<i>rs2237298</i>	17348119	<i>AHR</i>	A/G	INTRON	2	3		0.654721
<i>rs2158041</i>	17368420	<i>AHR</i>	G/A	INTRON	10	6		0.317311
<i>rs7811989</i>	17371363	<i>AHR</i>	G/A	INTRON	18	11		0.193647
<i>rs2040623</i>	17380662	<i>AHR</i>	T/G	INTRON	1	2		0.563703
<i>rs10257697</i>	18090280	<i>INTERGENIC</i>	G/A	5' HDAC9	7	5		0.563703
<i>rs6966799</i>	18104972	<i>INTERGENIC</i>	T/C	5' HDAC9	4	4		1
<i>rs2731569</i>	18134620	<i>HDAC9</i>	C/A	INTRON	8	8		1
<i>rs2697903</i>	18152747	<i>HDAC9</i>	A/T	INTRON	8	14		0.200825
<b><i>rs1178355</i></b>	<b>18204811</b>	<b><i>HDAC9</i></b>	<b>G/T</b>	<b>INTRON</b>	<b>11</b>	<b>3</b>		<b>0.032509</b>
<i>rs615545</i>	18391871	<i>HDAC9</i>	A/G	INTRON	2	6		0.157299
<i>rs10486301</i>	18409781	<i>HDAC9</i>	A/G	INTRON	6	7		0.781511
<i>rs2012064</i>	18447324	<i>HDAC9</i>	C/G	INTRON	6	6		1
<i>rs213272</i>	18504411	<i>HDAC9</i>	A/G	INTRON	7	4		0.365712
<i>rs2520459</i>	18519676	<i>HDAC9</i>	C/T	INTRON	5	13		0.059346
<b><i>rs10243618</i></b>	<b>18522740</b>	<b><i>HDAC9</i></b>	<b>A/G</b>	<b>INTRON</b>	<b>7</b>	<b>1</b>		<b>0.033895</b>
<i>rs17432448</i>	18548419	<i>HDAC9</i>	A/G	INTRON	3	5		0.4795
<i>rs801758</i>	18564562	<i>HDAC9</i>	G/A	INTRON	16	21		0.41108

<i>rs13231835</i>	18565058	<i>HDAC9</i>	C/T	INTRON	14	16		0.715001
<i>rs11543651</i>	18590659	<i>HDAC9</i>	C/T	INTRON	4	15		0.011617
<i>rs801763</i>	18601365	<i>HDAC9</i>	C/T	INTRON	2	1		0.563703
<i>rs2520456</i>	18614519	<i>HDAC9</i>	G/T	INTRON	19	33		0.052204
<i>rs3807917</i>	18616914	<i>HDAC9</i>	C/T	INTRON	15	12		0.563703
<i>rs1615309</i>	18619934	<i>HDAC9</i>	C/T	INTRON	5	12		0.089555
<i>rs2520458</i>	18622929	<i>HDAC9</i>	G/T	INTRON	16	13		0.577469
<i>rs2073974</i>	18624800	<i>HDAC9</i>	C/T	INTRON	1	0		0.317311
<i>rs1726595</i>	18625532	<i>HDAC9</i>	A/G	INTRON	14	13		0.84739
<i>rs2695029</i>	18626623	<i>HDAC9</i>	A/G	INTRON	6	6		1
<i>rs2695028</i>	18627486	<i>HDAC9</i>	C/T	INTRON	10	16		0.239317
<b><i>rs1726610</i></b>	<b>18630208</b>	<b><i>HDAC9</i></b>	<b>G/T</b>	<b>INTRON</b>	<b>16</b>	<b>5</b>		<b>0.016377</b>
<i>rs2695027</i>	18631680	<i>HDAC9</i>	C/T	INTRON	14	13		0.84739
<i>rs3814992</i>	18634929	<i>HDAC9</i>	G/A	INTRON	9	10		0.818546
<i>rs3814993</i>	18635277	<i>HDAC9</i>	C/T	INTRON	8	11		0.491297
<i>rs2704280</i>	18640746	<i>HDAC9</i>	G/A	INTRON	11	19		0.144127
<i>rs6963748</i>	18666217	<i>HDAC9</i>	C/T	INTRON	4	9		0.165518
<i>rs2188320</i>	18666901	<i>HDAC9</i>	A/C	INTRON	11	14		0.548506
<b><i>rs801540</i></b>	<b>18672384</b>	<b><i>HDAC9</i></b>	<b>G/T</b>	<b>INTRON</b>	<b>8</b>	<b>30</b>		<b>0.000359</b>
<i>rs2269754</i>	18699475	<i>HDAC9</i>	A/G	INTRON	6	2		0.157299
<b><i>rs1178108</i></b>	<b>18743747</b>	<b><i>HDAC9</i></b>	<b>A/G</b>	<b>INTRON</b>	<b>6</b>	<b>19</b>		<b>0.009322</b>
<b><i>rs1178112</i></b>	<b>18746213</b>	<b><i>HDAC9</i></b>	<b>A/G</b>	<b>INTRON</b>	<b>3</b>	<b>13</b>		<b>0.012419</b>
<i>rs1178117</i>	18750392	<i>HDAC9</i>	G/T	INTRON	12	10		0.669815
<i>rs1178121</i>	18762652	<i>HDAC9</i>	A/C	INTRON	2	4		0.414216
<i>rs212664</i>	18763117	<i>HDAC9</i>	C/A	INTRON	12	17		0.35316
<i>rs1178127</i>	18767343	<i>HDAC9</i>	A/G	EXON-SYNON	6	8		0.59298
<i>rs1178128</i>	18767714	<i>HDAC9</i>	A/G	INTRON	5	4		0.738883
<i>rs1178129</i>	18768334	<i>HDAC9</i>	G/T	INTRON	6	1		0.058782
<b><i>rs11764116</i></b>	<b>18800413</b>	<b><i>HDAC9</i></b>	<b>G/T</b>	<b>INTRON</b>	<b>11</b>	<b>1</b>		<b>0.003892</b>
<i>rs17139840</i>	18800603	<i>HDAC9</i>	C/T	INTRON	4	2		0.414216
<i>rs6959028</i>	18806051	<i>HDAC9</i>	C/A	INTRON	17	13		0.465209
<i>rs13241957</i>	18808396	<i>HDAC9</i>	T/C	INTRON	5	3		0.4795
<i>rs7776786</i>	18810243	<i>HDAC9</i>	C/T	INTRON	10	9		0.818546
<i>rs1011446</i>	18811610	<i>HDAC9</i>	A/G	INTRON	6	7		0.781511
<i>rs7783171</i>	18828796	<i>HDAC9</i>	G/T	INTRON	12	17		0.35316
<i>rs2028016</i>	18834799	<i>HDAC9</i>	A/G	INTRON	7	3		0.205903
<i>rs10950704</i>	18836179	<i>HDAC9</i>	A/G	INTRON	6	9		0.438578
<b><i>rs12540872</i></b>	<b>18836667</b>	<b><i>HDAC9</i></b>	<b>G/A</b>	<b>INTRON</b>	<b>24</b>	<b>11</b>		<b>0.027992</b>
<i>rs6974011</i>	18838463	<i>HDAC9</i>	C/A	INTRON	9	10		0.818546
<i>rs12531908</i>	18838616	<i>HDAC9</i>	G/A	INTRON	9	11		0.654721
<i>rs7810384</i>	18844771	<i>HDAC9</i>	C/T	INTRON	15	19		0.492717
<b><i>rs10269422</i></b>	<b>18854601</b>	<b><i>HDAC9</i></b>	<b>T/A</b>	<b>INTRON</b>	<b>3</b>	<b>12</b>		<b>0.020137</b>
<i>rs13241157</i>	18860014	<i>HDAC9</i>	A/G	INTRON	4	9		0.165518
<i>rs17349860</i>	18868031	<i>HDAC9</i>	C/T	INTRON	2	7		0.095581
<i>rs957960</i>	18877408	<i>HDAC9</i>	A/C	INTRON	7	14		0.12663

<i>rs756853</i>	18890000	<i>HDAC9</i>	A/G	INTRON	8	9		0.808365
<i>rs2249817</i>	18896011	<i>HDAC9</i>	A/G	INTRON	0	1		0.317311
<i>rs6461389</i>	18907030	<i>HDAC9</i>	C/T	INTRON	9	11		0.654721
<i>rs1034805</i>	18977403	<i>HDAC9</i>	C/T	INTRON	4	11		0.070701
<i>rs10223990</i>	18979516	<i>HDAC9</i>	A/G	INTRON	6	12		0.157299
<i>rs11505418</i>	18993249	<i>HDAC9</i>	C/T	INTRON	17	11		0.256839
<i>rs10486330</i>	18994401	<i>HDAC9</i>	G/A	INTRON	18	13		0.369171
<i>rs17140399</i>	18998604	<i>HDAC9</i>	C/A	INTRON	12	6		0.157299
<i>rs6461396</i>	19001691	<i>HDAC9</i>	T/C	INTRON	5	10		0.196706
<i>rs7808451</i>	19002886	<i>HDAC9</i>	G/T	INTRON	5	7		0.563703
<i>rs993083</i>	19009704	<i>HDAC9</i>	T/C	INTRON	2	6		0.157299
<i>rs6968777</i>	19011349	<i>HDAC9</i>	T/C	INTRON	12	18		0.273322
<i>rs2240279</i>	19018009	<i>HDAC9</i>	G/A	INTRON	12	9		0.512691
<i>rs10268180</i>	19019671	<i>HDAC9</i>	T/C	INTRON	11	10		0.827259
<i>rs2717349</i>	19023736	<i>HDAC9</i>	C/G	INTRON	20	13		0.223018
<i>rs2526632</i>	19032809	<i>HDAC9</i>	G/T	INTRON	3	7		0.205903
<i>rs7776735</i>	19036909	<i>HDAC9</i>	C/T	3'UTR	3	1		0.317311
<i>rs34426483</i>	105615426	<i>CDHR3</i>	C/G	EXON-MIS	12	9		0.512691
<i>rs176501</i>	105752691	<i>SYPL1</i>	A/G	5' UTR	10	18		0.13057
<i>rs2074796</i>	112112279	<i>IFRD1</i>	A/G	EXON-SYN	3	9		0.083265

Supporting Information Table 1: **All SNPs for preferential allelic imbalance analysis.**

108 SNPs in and around eight candidate genes at *SKTS5* were part of the initial allelic imbalance study. Two SNPs were eliminated due to contamination issues or if they were out of Hardy-Weinberg equilibrium. Of the 108 SNPs, nine (bolded) showed evidence of preferential allelic imbalance in cSCC tumors. UTR, untranslated region; MIS, missense polymorphism; SYN, synonymous polymorphism. p-values are unadjusted.